

MINES, MINING, COPPER STOCKS AND COPPER

High Tide Prosperity in the Affairs of The Warren District--Great Work Being Done, With Splendid Future Outlook

MORE MEN NOW EMPLOYED THAN EVER BEFORE, WITH ACTIVITIES UNDERGROUND AND ON TOP CONSTANTLY INCREASING — CONCENTRATOR CONSTRUCTION UNDERWAY — WITH SMELTER BETTERMENTS, MEANS MAKING AVAILABLE OF EVERY CHARACTER OF ORE — INSTALLATION OF BIG ELECTRIC HOISTS AND STEEL GALLOWS FRAMES AT C. Q. SHAFTS TELL STORY

March is nearing its close with another fine record of output of ore from the mines of the Warren district. Copper Queen has kept up its tonnage to the daily average of recent months in the past, while its development division and surface departments have carried some extra pressure. Calumet & Arizona has maintained the largely increased production which was started in December. Shattuck has been holding its average in output, with more than usual activity in development. Wolverine and the other small operators are probably a little ahead of the February daily record.

LARGEST ACTIVITY EVER ENJOYED

The activity now prevailing is the largest in the history of the district. Pay rolls are at the record figure. There are more men at work than ever before, and more people in the district. The mines never looked so well nor extended greater confidence as to the future. Operations underground and on top are moving with entire smoothness and the attainment of high efficiency. Equipment of properties is at the top notch in quality and extent. And there is every reason for the belief that the steady gain attending general operations and resources of the district will continue indefinitely along the present smooth path, with resultant benefit of material character for each and every individual associated with the district, no matter his line of endeavor.

ALL CHARACTERS OF ORE RELEASED

The construction of the new Calumet & Arizona smelter has been a greater boon to the district than perhaps most people have realized. It has made it possible to go after every grade and character of ore on the big properties of this company and has made other holdings look desirable to it which might not have had near so good appearance, from the standpoint of usefulness a little while back. Possibly the Bisbee-Calumet and Higgins claims, recently acquired, might be classed under this head. Now the Copper Queen is making preparations to add to its smelter equipment to advantageous end in point of handling a wider range of ores to profit as well as attaining better results from some characters of ore they are now working.

WILL ADD McDUGGAL FURNACES

Specifications are now being made for seven new McDougall furnaces. The latter part of the year will probably see the beginning of construction. They will give to the plant a battery of sixteen in all. The point striven for is a cleaner grade of matte and greater elasticity in the plant. Treatment of sulphides to better advantage will in particular be facilitated. While the additional furnaces will make it possible to do bigger things in output under pressure, or when desired, the main feature said to be now considered is the higher efficiency that will be attained. Increase output will be possible, but is not the feature now contemplated as most desirable. The smelter is keeping a very fairly even monthly rate of output and one that is satisfactory in quantity. Some fluctuation from month to month is mainly by reason of variation in kinds of ore delivered. The new furnaces will make it possible to overcome this.

ELECTRIC INSTALLATION INCREASES

That electric power is proving very satisfactory in its results in Copper Queen mines operating division is best indicated by the steady expansion which is being made in its use. At the immediate time two very important new installations are being made, one at the Czar and the other at the Uncle Sam. At these two big shafts electric hoists are being installed. At the Czar the erection of a new steel gallows frame, one of the largest in the district, is being made to go with the new electric installation. At the Uncle Sam there will also be a steel gallows frame put up.

IMPORTANT INSTALLATIONS

The installation of this new equipment at these shafts tells its own story of the activities that are being carried on at steadily increasing rate. The new hoists will have considerably greater capacity than the ones they replace. The larger capacity is made requisite by the bigger work that is being done and that is mapped out for the future. Both the Czar and the Uncle Sam have developed a lot of new territory in the last year and have a great deal more ahead of them. The Czar will take on much enlarged responsibilities and labors with the further development and the mining of the near the surface ore bodies, while its lower levels are narrowing none in the burdens they impose. The Uncle Sam has been productive of some very good things in recent months in new territory of much richness and extent and it too has a great deal more work looking ahead than was formerly in prospect.

THE WAY OF THE DISTRICT

Such is the way of the district. It keeps adding all the time to old riches with new ground. It costs money to cut up the country and go after the new things, to a certainty, but in the Warren district this policy has never failed to pay. It takes both money and nerve to do it, but without these essentials there would be no mines here. Patient hearted line of policy in this respect in the past could at any one of a dozen stages of the development game, readily enough have put the camp in the discard for an indefinite period, if not forever. Money, intelligence and nerve are responsible for the prosperity the district now enjoys and the vast amount of labor its mines afford. Mining men never look at the district's surface formation without making that admission and declaring that the pioneers in the development of the camp required the strong backbones which they possessed and without which they would never have got by.

MADE GOOD FOR EVERYBODY

Not only did they make good for themselves, but they also made good for

everybody else. The camp of today for which they are responsible has accomplished more for the development of Arizona than all other agencies combined, in bringing transportation service, general investment, population and prosperity. Today Bisbee is without question the home of the most generally prosperous mining community anywhere in America. Its miners are receiving better wages, month in and month out, are better satisfied with conditions, enjoy more comforts of life and a happier climate, and have more to look forward to in point of further development of large prosperity and long life of employment, than have the people of any other mining community on the continent. Butte is no exception to this.

CONCENTRATOR CONSTRUCTION

Work now going on at the site of the test mill being put up to determine what will really be best in equipment for the final concentrator that is to be erected, affords an excellent bit of backing for the remarks in the preceding paragraph. Those who know what a competent mill can do in the way of making low grade ores profitable to the miner, will not question for a minute the big meaning of the coming of a concentrator to this district. And none who know mine management in this district will question that this concentrator has an abundant period of activity cut out for it. The ore is here and demonstrated. Otherwise there would have been no announcement of intention to erect a concentrator.

INCREASED LABOR AND PRODUCTION

It has been pointed out in the past on several occasions that this concentrator and the supplying of ore for it can figure only one way, the same being largely increased operating forces both on the surface and underground in the Copper Queen near the surface low grade ore areas. It is also well to be remembered that the Calumet & Arizona has some of this same sort of territory which it will be mining and milling in due time. But dealing solely with the Copper Queen at this time, the concentrator line of expansion means a very healthy increase at no distant date in employment of men all the year round. Many hands are required in the running of a mill, no matter how much automatic equipment may be introduced. There must be skilled attention to equipment all the time, for there are a great many things about a mill that require constant watching, and the labor account is certain of being considerable. Underground there is a proportionately much larger one in getting out the material for the mill.

ERECTION WORK UNDERWAY

At the site of the test mill below the Sacramento shaft there is work going ahead steadily and things are rapidly beginning to take shape there in the construction department. The excavations have all about been blasted out from the hillside. Concrete pouring frames are now going up and they will be using these very soon. The grade for the railroad track is nearing completion from the shaft. Down below they have put in timbers for the carriage of supplies up from the main line of the railroad. In a little while there will be superstructure going on the foundations and machinery equipment being set in position on the foundations made for its reception. Some of the equipment is beginning to arrive. A considerable number of men are employed on this work and there will be a good many more pretty soon. It has the tone of a moving enterprise of a very decided value, and it will make good up to best expectations along this line.

ALTERING THE TOPOGRAPHY

The vast amount of surface work which the Copper Queen is carrying on is little appreciated in the district, for the reason that the public does not come in contact with more than a small portion of it at any given time and, furthermore, is so accustomed to continued activities in all directions about the district that inauguration of a new piece of work now and then fails to attract more than passing comment. As this work goes on from day to day toward completion, the eye becomes accustomed and the observer is unimpressed.

MOVING THOUSANDS OF TONS

No one has made particular note in a long time of the big work going on in Bisbee canyon. It has been underway more than a year and thousands of tons of waste have been dumped from the Czar workings into the gulch. Gradually they are filling up the old time landmarks and in a matter of months there will be a large level area added to the mine and railroad yard room, where a year ago there was only unavailable waste space in the rocky canyon and watery depressions.

MAKING SOME BIG FILLS

The bridge over the gulch to the Czar from the town, which has been trod in past years by hundreds of thousands of men on their way to and from shifts, will soon be only a memory. It is due to give place to the filled ground which has gradually been creeping out alongside and above it in the last year. This fill will make a wide wagon, truck and foot road which will be much more convenient and also provide a great deal more safety for traffic than the wooden structure with which it will do away. Beside which there will be room made for much needed railroad trackage and for the erection perhaps of needed buildings, before the job is done.

ECONOMY OF SPACE AS WELL AS OTHER THINGS

Incidentally there is carried in this work an illustration of the fact that the successful conduct of a big copper property in the present day calls for economy in every direction that may afford a way. The fill being made with Czar waste will mean lesser cost of maintenance of property of the company in Bisbee gulch. It will mean the attaining, also of room in con-

RARE VOLUMES TO U. S. MILLIONAIRE



The Duke of Devonshire (top) and Henry E. Huntington.

The Duke of Devonshire is reported to have sold his library of rare volumes to Henry E. Huntington, the American multi-millionaire, for a sum exceeding \$1,000,000. The Chateaufort library, consisting of the Cartoons and the Rembrandt collection of plays, are part of the collection. The British museum was anxious to obtain the rare editions, but was obliged to retire.

TWO FRENCHMEN IN 500-MILE AUTO RACE



Jules Goux (top) and Jean Chassagne.

Two Frenchmen, Jules Goux and Jean Chassagne, will battle for first place in the motor speedway races at Indianapolis on Decoration day. Goux was the winner of the last 500-mile race at Indianapolis. Chassagne is holder of the world's hour record of 112 miles 1,760 yards, established on the Brooklands track recently.

Mine Car will Visit the District

**WILL ARRIVE HERE ON
WEDNESDAY FOR STAY
OF A WEEK — MUCH
INTEREST EVIDENCED**

The event of the present week will be the arrival on Wednesday of the Mine Bureau Rescue Car No. 2, which has been touring in the state during the present month and which has been met with a great deal of interest and subsequent favor in every district that it has visited.

Announcement during the week that the car would arrive here on Wednesday next occasioned widespread local interest among miners. All have read a great deal about these Mines Bureau cars and the good work they have accomplished, and not a few now in the district have visited the cars in Colorado, Michigan and eastern districts, where they have been regular visitors to the mining districts the last few years, but the majority of miners in Arizona are unfamiliar with the cars and their work through personal contact.

It is generally recognized that the staffs on these cars and the equipment they make use of in modern devices, represent the very highest degree of efficiency that science has been able to produce. No matter how much may be known by the miner and the local rescue worker in any mining district, he is sure to learn something new from the rescue car workers. This is for the reason that they are continually adding new things to their store of knowledge, gathered all over the world and assembled in each mining district visited.

During the stay of the car in the Warren district, which will be from Wednesday next until the following Wednesday, the car will be open each day to the visits of all miners and all are urged to take advantage of the opportunity. There will be lectures and instruction work given classes on the car daily. Each evening there will be lectures given at the Y. M. C. A. gymnasium hall. These lectures are free and open to all, and it is the belief that each night will see the hall packed with men eager to learn new things. The lectures will be attended by illustrations.

THE COPPER OUTPUT

**Some Authorities Believe That Low
Prices for 1914 Are Now Being
Made**

If there is any question as to the falling off in business among the copper consumers, the fact that for four months domestic deliveries have averaged but 41,000,000 pounds per month would certainly seem to answer the question, says the Thompson, Towle & Co. News Letter, continuing: "Therefore an improved future for the copper metal market hinges upon the question of business in this country, and when it is going to become normal from the present sub-normal of 50 to 75 per cent."

This return cannot be very far off, and with the turn copper is bound to improve in price, for during our present reaction Europe has taken much low-priced metal to replenish stocks which were down to only nominal figures.

Consumers in this country must have eaten heavily into invisible supplies, and it is certain that somebody will soon be getting ready to furnish the St. Paul R. R. with copper. The requirements for electrification will call for 130,000,000 pounds of new copper at a minimum.

Some good copper authorities believe that the low prices for copper for the year 1914 are now being made.

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